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GS1 UK[®] healthcare terms and definitions

Term	Acronym	Definition
AIDC data carrier		Generic term for a barcode or RFID tag; a means of physically affixing machine-readable data to a physical entity.
Automatic identification and data capture	AIDC	A technology used to automatically capture data. AIDC technologies include barcodes, smartcards, biometrics and RFID.
Barcode		A symbol that encodes data into a machine-readable pattern of adjacent, varying width, parallel, rectangular, or square dark and light spaces.
Barcode verification		The assessment of the printed quality of a barcode based on ISO/IEC standards using ISO/IEC compliant barcode verifiers.
Base unit		In a hierarchy of trade item groupings, this is the consumer trade item level or unit of use.
Basic UDI-DI	BUDI-DI	The Basic UDI-DI is a unique identifier specific to a medical device product family. It is represented by the GS1 Global Model Number (GMN).
Batch / lot number		Associates an item with information the manufacturer considers relevant for traceability of the trade item.
Check character pair		A final character pair calculated from the other characters of the Global Model Number. These characters are used to check that the data has been correctly composed and transmitted.
Check digit		Numeric character calculated from data and appended as part of the data string to ensure that the data is correctly composed and transmitted.
Concatenation		The representation of several element strings in one barcode.
Data element		A unit of data for which the identification, description and value representation have been specified.
Data Synchronisation		The process of continuous harmonisation of information between all trading partners which ensures that the master data is the same in all trading partners systems. This process uses the GS1 system standards developed by GS1.
Direct part marking	DPM	Direct part marking refers to the process of marking a symbol on an item (e.g. medical implants, surgical instruments) using an intrusive or non-intrusive method.

Term	Acronym	Definition
EAN/UPC symbology		A family of barcodes including EAN-8, EAN-13, UPC-A, and UPC-E barcodes as well as the 2- and 5-digit add-ons. See also EAN-8 barcode, EAN-13 barcode, UPC-A barcode, and UPC-E barcode below.
EAN-8 barcode	EAN-8	A barcode of the EAN/UPC symbology that encodes GTIN-8 or RCN-8. See GTIN-8 and Restricted Circulation Number below.
EAN-13 barcode	EAN-13	A barcode of the EAN/UPC symbology that encodes GTIN-13 or RCN-13. See GTIN-13 and Restricted Circulation Number below.
Electronic data interchange	EDI	Transactional data that enables the computer-to-computer exchange of business documents between companies using a standardised format.
Element		A single bar or space of a linear barcode symbol.
The European Medical Device Nomenclature	EMDN	The European Medical Device Nomenclature (EMDN) will be the nomenclature of use by manufacturers when registering their medical devices in the EUDAMED database. EMDN is founded on pre-established criteria and requirements.
European Database for Medical Devices	EU-DAMED	The EUDAMED stands for “European Database for Medical Devices” and is operated by the European Commission to centralise all relevant information on medical devices on the EU market and to ensure traceability and transparency. EUDAMED is based on a decision of the European Commission (2010/227 / EU).
Fixed length		Term used to describe a data field in an element string with an established number of characters.
Function 1 Symbol Character	FNC1	A symbology character used in some GS1 data carriers for specific purposes.
General distribution scanning		Scanning environments that process barcoded trade items packaged for transport, logistic units, assets and location tags.
General retail consumer trade item		A trade item intended to be sold at the point of sale identified with a GTIN-13, GTIN-12 or GTIN-8 utilising omnidirectional linear barcodes.

Term	Acronym	Definition
Global Data Synchronisation Network	GDSN	An internet-based, interconnected network of interoperable data pools and the GS1 Global Registry that enables continuous harmonisation of information between all trading partners which ensures that the master data is the same in all trading partners systems.
GS1®		Based in Brussels, Belgium it is the organisation that manages the GS1 system. Its members are GS1 Member Organisations. The term 'GS1' is not an acronym.
GS1 Company Prefix	GCP	A unique string of four to twelve digits used to issue GS1 Identification Keys. The first digits are a valid GS1 Country Prefix and the length must be at least one longer than the length of the GS1 Country Prefix. The GS1 Company Prefix is issued by a GS1 Member Organisation. As the GS1 Company Prefix varies in length, the issuance of a GS1 Company Prefix excludes all longer strings that start with the same digits from being issued as GS1 Company Prefixes.
GS1 Identification Key		A unique identifier for a class of objects (e.g., a trade item), an instance of an object (e.g., logistic unit, medical implant, assets), a physical or legal location, (e.g., a warehouse or hospital, a legal entity), documents (e.g., medical records), people (e.g., patients, caregivers), and groups of products (e.g., medical devices).
Global Location Number	GLN	The GS1 Identification Key used to identify physical locations or parties. The key comprises a GS1 Company Prefix, location reference and check digit.
GLN extension component		The GLN extension component is used to identify internal physical sub-locations within a location (such as a selling floor area, a specific area on a shelf, etc.) which is identified with a GLN (such as stores, factories, buildings, etc.).
Global Individual Asset Identifier	GIAI	The GS1 Identification Key used to identify an individual asset. The key comprises a GS1 Company Prefix and individual asset reference.
Global Returnable Asset Identifier	GRAI	This GS1 Key is especially suitable for the management of reusable transport items, transport equipment, and tools and can identify these returnable assets by type and if needed also individually for tracking and sorting purposes.
Global Model Number	GMN	The GS1 Identification Key used to identify a product model or product family. The key comprises a GS1 Company Prefix, model reference and a check character pair.

Term	Acronym	Definition
Global Service Relation Number	GSRN	The GS1 Identification Key used to identify the relationship between an organisation offering services and the recipient or provider of services (e.g., clinician and patient). The key comprises a GS1 Company Prefix, service reference, and check digit.
Global Trade Item Number®	GTIN®	The GS1 Identification Key used to identify trade items. The key comprises a GS1 Company Prefix, an item reference and check digit.
Global Medical Device Nomenclature	GMDN	Global Medical Device Nomenclature is a system of internationally agreed generic descriptors used to identify all medical device products. This nomenclature is a naming system for products which include those used for the diagnosis, prevention, monitoring, treatment or alleviation of disease or injury in humans.
GS1 Application Identifier	AI	The field of two or more digits at the beginning of an element string that uniquely defines its format and meaning.
GS1 element string		A syntax for expressing GS1 Identification keys and attributes in a format using GS1 Application Identifiers and GS1 Application Identifier data fields.
GS1 DataMatrix		A subset of DataMatrix which uses the function that allows the encoding of elements strings.
GS1-128 symbology	GS1-128	A subset of Code 128 which uses the function that allows the encoding of element strings.
GTIN-8		The 8-digit GS1 Identification Key composed of a GS1-8 Company Prefix, item reference and check digit used to identify trade items.
GTIN-12		The 12-digit GS1 Identification Key composed of a U.P.C. Company Prefix, item reference and check digit used to identify trade items.
GTIN-13		The 13-digit GS1 Identification Key composed of a GS1 Company Prefix, item reference and check digit used to identify trade items.
GTIN-14		The 14-digit GS1 Identification Key composed of an indicator digit (1-9), GS1 Company Prefix, item reference and check digit used to identify trade items.

Term	Acronym	Definition
Healthcare primary packaging		The first level of packaging for the product marked with an AIDC data carrier either on the packaging or on a label affixed to the packaging. For non-sterile packaging, the first level of packaging can be the packaging in direct contact with the product. For sterile packaging, the first level of packaging can be any combination of the sterile packaging system and may consist of a single item or group of items for a single therapy such as a kit. For packaging configurations that include a retail consumer trade item, primary packaging is a packaging level below the retail consumer trade item.
Healthcare secondary packaging		A level of packaging marked with an AIDC carrier that may contain one or more primary packages, each of which may contain a single item or multiple items.
Human readable interpretation	HRI	Characters, such as letters and numbers, which can be read by persons and are encoded in GS1 AIDC data carriers confined to a GS1 standard structure and format. The human readable interpretation is the encoded data. Start, stop, shift and function characters, as well as the symbol check character, are not shown in the human readable interpretation.
Item reference		A component of the Global Trade Item Number (GTIN) assigned by the brand owner to create a unique GTIN.
Leading zero(es)		Adding zero(es) to the leftmost position of a data string can be used to fill character spaces when required such as when a GTIN-8, GTIN-12, or GTIN-13 is encoded in a GS1 AIDC data carrier, message, or database that requires 14 digits. The same is also applied to other data structures such as GRAI.
Linear barcode		Barcode symbology using bars and spaces in one dimension.
Location reference		A component of a Global Location Number (GLN) that allows the party defining the party or location to create a unique GLN.
Module		The narrowest nominal width unit of measure in a barcode. In certain symbologies, element widths may be specified as multiples of one module. The nominal width (and height for 2D barcodes) of a single module is equivalent to the X-dimension (see X-dimension below).
Point of care	POC	The point in time when clinicians deliver healthcare products and services to patients at the time of care. POC scanning of barcodes can be used to associate the products used and the clinicians delivering the service to the electronic patient record.

Term	Acronym	Definition
Quick response code	QR code	Matrix barcode symbology that carries up to 4,296 characters and can hold a URL.
Quiet Zone Indicator		A greater than (>) or less than (<) character, printed in the human readable field of the barcode with the tip aligned with the outer edge of the Quiet Zone.
Regulated healthcare trade item		Pharmaceuticals or medical devices that are sold or dispensed in a controlled environment (e.g. retail pharmacy, hospital pharmacy).
Regulated healthcare non-retail consumer trade item		A regulated healthcare trade item not intended for scanning at point of sale (POS) and identified with a GTIN-14, GTIN-13, GTIN-12 or GTIN-8 utilising linear or 2D DataMatrix barcodes that can be scanned by image-based scanners.
Regulated healthcare retail consumer trade item		A regulated healthcare trade item to be sold to the end consumer at a regulated healthcare retail point of sale (e.g. pharmacy). They are identified with a GTIN-13, GTIN 12 or GTIN-8 utilising linear or 2D DataMatrix barcodes that can be scanned by image-based scanners.
Restricted Circulation Number	RCN	Signifies an identification number used for special applications in restricted environments, either defined by local GS1 Member Organisations (for regional applications such as variable measure product identification and couponing, or by a company (for internal applications).
Scan4Safety	S4S	A pioneering programme which was initially led by the Department of Health and Social Care in 2016. The programme now sits with the Medical Directorate of NHS England.
Serial shipping container code	SSCC	The globally unique GS1 system identification number for logistics units. The SSCC is an 18-digit number with an extension digit, the GS1 Company Prefix, serial reference, and check digit.
Serial number		A code, numeric or alphanumeric, assigned to an individual instance of an entity for its lifetime. For example, a unique individual item may be identified with the combined Global Trade Item Number (GTIN) and serial number.
Symbology identifier		A sequence of characters generated by the decoder (and prefixed to the decoded data transmitted by the decoder) that identifies the symbology from which the data has been decoded.
Trade item		Any item (product or service) upon which there is a need to retrieve predefined information and that may be priced, or ordered, or invoiced at any point in any supply chain.
Two-dimensional symbology	2D	Optically readable symbols that must be examined both vertically and horizontally to read the entire message. Two-dimensional symbols may be one of two types: matrix symbols and multi-row symbols. Two-dimensional symbols have error detection and may include error correction features.

Term	Acronym	Definition
Unique Device Identifier	UDI	A series of numeric or alphanumeric characters that is created through a globally accepted device identification and coding standard. It allows the unambiguous identification of a specific medical device on the market. The UDI is comprised of the UDI-DI and the UDI-PI (see below). The word 'unique' does not imply serialisation of individual production units.
Unique Device Identifier – Device Identifier	UDI-DI or DI	A unique identifier specific to a medical device trade item represented by a Global Trade Item Number (GTIN).
Unique Device Identifier – Production Identifier	UDI-PI or PI	A numeric or alphanumeric code that identifies the unit of device production. The different types of UDI-PIs include serial number, lot number, software identification and manufacturing or expiry date or both types of date.
Unit of Use UDI-DI	UoU UDI-DI	Device identifier for the unit of use meant to associate the use of a device with a patient. In cases where the unit of use coincides with another packaging level, that level's device identifier functions as a UoU UDI-DI, otherwise a separate device identifier has to be allocated. For example, three clips (which do not carry a physical UDI marking themselves) are contained in a cartridge which is packaged inside a container, which does carry a labelled UDI.
UPC-A barcode	UPC-A	A barcode of the EAN/UPC symbology that encodes GTIN-12 and RCN-12.
UPC-E barcode	UPC-E	A barcode of the EAN/UPC symbology representing a GTIN-12 in six explicitly encoded digits using zero-suppression.
X-dimension		The specified width of the narrowest element of a barcode (see module above).

GS1 standards: Identify, capture, share

Identify: GS1 identification numbers



Capture: GS1 data carriers

Barcodes



Item level GTIN



Item, box, case level GTIN with extended data or serial shipping container code (SSCC)



Case level GTIN



Item, box level GTIN with extended data



Item, box, case level GTIN with extended data



Item, box, case level



Item, box, case level

Share: GS1 data exchange

Master data

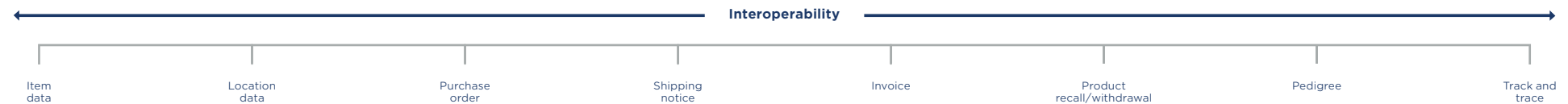
GS1 UK Truesource Global Data Synchronisation Network (GDSN)™ | GS1 UK LocationManager

Transactional data

Electronic Data Interchange (EDI)

Physical event data

EPC information services (EPCIS)



Data sharing standards

Product master data

GDSN - Global Data Synchronisation Network

The GDSN connects trading partners to the GS1 Global Registry® via GS1-certified data pools.

Phase 1: Foundational supply chain data

Phase 2: Regulatory data

Transactional data

EDI - electronic data interchange

EDI enables the computer-to-computer exchange of business documents between companies using a standardised format.

• Purchase order • Advance ship notice • Invoice • Payment

Physical event data

Critical tracking events via EPCIS - Electronic Product Code Information Systems

EPCIS is the standard for sharing information about the movement and status of goods in the physical world. EPCIS events are captured and shared by the party at the:

Beginning of the supply chain - Manufacturer

- Commissioning
- Packing
- Shipping

Intermediate part of the supply chain - Wholesale distributor

- Receiving
- Commissioning
- Shipping
- Unpacking
- Packing

End of the supply chain - Dispenser

- Receiving
- Dispensing
- Decommissioning
- Unpacking
- Destroying